## EFFICACY STUDY REVIEW

by Kevin J. Sweeney, Entomologist - IB

To: Beth Edwards

Date: April 22, 1998

EPA Reg. or File No.: 239-2661

Product Name: Home Defense Indoor & Outdoor Insect Killer 3

Registrant: Monsanto Co.

PM: George LaRocca

Action: 305

Submission No(s). S540098, DP244807

Chemical: bifenthrin, insecticide (I)

Studies Submitted:

Product Performance/Efficacy Data on Ticks to Support Lyme Disease Label Claims
This includes studies on topical application of bifenthrin to deer ticks, Ixodes scapularis;
American dog tick, Dermacentor variabilis; and the Brown dog tick, Rhipicephalus sanguineus.

MRID # 445090-01

The registrant wishes to add "ticks that carry Lyme disease to the label."

The data included in these studies supports label claims for killing ticks. Therefore, the label language "Kills Ticks" and "Kills ticks that transmit Lyme disease" is acceptable. Since only deer ticks transmit Lyme disease, the registrant may add a kill claim for "American dog ticks" and "Brown dog ticks" to the label.

The label makes claims of residual control for ticks in structures and pet quarters, however, there is no residual test data submitted with this amendment. They cannot include residual claims for ticks and must delete them from the label. The label must be specific about tick claims.

residual control of ticks was supported in original submission. It is identical to 239-3191. This amendment was only adding the claim "including ticks that transmit hyme disease." But

The addition of Harvester ants is acceptable. However, the addition of scorpions on the label requires data unless it was on an earlier label version.

200 previous label.
Supported by original application.